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FEB 01 2007

Application No.: 10/812,447

Docket No.: JCLA10877

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REMARKS

Claims 1-40 are still pending of which the claims 1, 11, 14, 15, 26, 29, 30 and 37 have been amended because of their informalities without prejudice or disclaimer in order to more explicitly describe the claimed invention. The claims 1-2, 5-14, 30-31 and 34-40 were rejected under 35 U.S.C. 102(b) as being anticipated by Winsor. More, the claims 3-4, 15-29 and 32-33 were rejected under 35 U.S.C. 103(a). Applicant respectfully traverses the rejection based the following argument. Reconsideration and allowance of the presently pending claims 1-40 are respectfully requested.

Discussion objection to the Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character not mentioned in the description: figure 8, item 304.

In response thereto, applicants correct item 304 in Fig.8 to be "item 340" because the reference numeral 304 is a typographical error of the reference numeral 340.

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Discussion objection to the claims

Claims 1, 11, 14, 15, 26, 29, 30 and 37 are objected because of their informalities set forth below.

In response thereto, the claims 1, 11, 14, 15, 26, 29, 30 and 37 are amended as instructed by the Examiner.

Discussion of rejection to claims under 35 U.S.C. §102(b)

Claims 1-2, 5-14, 30-31 and 34-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Winsor (us 6,100,635).

In response thereto, applicant respectfully traverses the rejection based on the following arguments. To establish a prima facie case of anticipation, the prior art reference (i.e. Winsor) should teach, suggest or disclose all claim limitations. The Examiner alleged that Winsor discloses a first plate (items 56, 58, 78, 80), having a plurality of grooves (items 68, 70). However, the preceding Examiner's allegation is incorrect because in Fig.2, items 56, 58 are side walls (see col.3, line 33), items 78, 80 are separator walls (see col.3, line 56) and these items 56, 58, 78, 80 are separated from grooves (86-93) and channel walls (68, 70). In other words, in Winsor, the first plate does not have the grooves and thus is not identical to that as claimed in the independent claims 1 and 30. Furthermore, from Fig.2, Winsor only discloses a

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pair of electrodes disposed on both sides of one serpentine channel (i.e. reference numeral 86-93), instead of "a plurality of electrodes, disposed on both sides of the airtight chambers, respectively,(emphasis added)" as claimed in the independent claims 1 and 30.

Additionally, in re claim 30, the Examiner alleged that from Figs. 2 and 4, Winsor discloses a cold cathode plate fluorescent lamp comprises a first plate (item 54) disposed on wave troughs of a wave-type structure in order to form first airtight chambers (item 65 and 87), and a second plate (item 66) disposed on wave peaks of the wave-type structure in order to form second airtight chambers (item 65 and 89). However, in Winsor, item 54 is a lamp body and doesn't have planar surface as required by "first plate," claimed in the claim 30, but has the surface with protrusions and grooves (see Fig.4). Accordingly, Winsor is incapable of forming the first airtight chambers (item 65 and 87) as claimed in the claim 30, wherein item 65 and 87 are formed between the lamp body 54 and the cover 66; that is, in fact, Winsor only discloses the second airtight chambers as alleged. Furthermore, in terms of functionality, due to the generation of the discharge path produced by one pair of electrodes, Winsor experiences a high temperature problem which doesn't meet demand of current TFT LCD system. In contrast, the present invention provides a low temperature fluorescent lamp by implementing many pairs of electrodes.

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In summary, Winsor fails to teach, suggest or disclose "a first plate, having a plurality of grooves and a plurality of electrodes, disposed on both sides of the airtight chambers, respectively," as claimed in independent claims 1 and 30. Furthermore, Winsor fails to teach, suggest or disclose "a first plate, disposed on the wave troughs, so that a plurality of first airtight chambers are formed between the wave-type structure and the first plate," as claimed in the claim 30. Thus, the independent claims 1 and 30 are not anticipated by Winsor and thus patentable.

Regarding dependent claims 2, 5-14, 31 and 34-40, they should be patentable as a matter of law for the reason that they contain all limitations of their corresponding patentable base claims 1 and 30.

Discussion of rejection to claims under 35 U.S.C. §103(a)

Claims 3-4 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winsor in view of Osawa et al. (US 5, 187, 415).

In response thereto, as discussed in preceding section, since claims 3-4 and 32-33 are dependent claims, they should be patentable as a matter of law for the reason that they contain all limitations of their corresponding patentable base claims 1 and 30.

Claims 15-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krefft (US 2,555,749) in view of Winsor.

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In response thereto, applicant respectfully traverses the rejection based on the following arguments. To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine references teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teachings or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir.1991). The Examiner failed to show that desirability of combining Krefft and Winsor is taught or suggested in either of them. The Examiner only alleged that it would be obvious to the artisan at the time the invention was made to modify Krefft's invention to include electrodes disposed on both sides of airtight chambers, respectively, as taught by Winsor for providing electrical energy into channels of the lamp. However, from

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Fig.1, in Krefft, a pair of electrodes 8, 9 are disposed in channels of the lamp in order to form a tortuous discharging path (see col.4, lines6-9). Thus, it is well known for the skilled artisan that there have no benefit (or improved functionality) if Krefft is modified to include electrodes disposed on both sides of every channels, respectively. Furthermore, to accomplish such modification, a substantial redesign for Krefft is required to arrange the plurality of electrode pairs as taught by Winsor because they disclose totally different top views of the fluorescent lamp; that is, one (i.e. Winsor) is a rectangular shape as shown in Fig.2, the other(i.e. Krefft) is a circular shape. Thus, such modification at least needs to change profile of the fluorescent lamp and rearrange the intermediate walls 5, 6 and 7 in Krefft. In other words, a substantial redesign for Krefft is required to accomplish such modification. Thus, from above discussion, for the skilled artisans, in view of either of Krefft and Winsor, or their combination, they are not motivated to combine them due to lack of benefit produced if combined (emphasis added). In other words, the independent claim 15 is not rendered obvious by Krefft and Winsor because a prima facie

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case of obviousness is not well established, and thus patentable.

From Fig.1, in Krefft, the reference numeral 1 and 2 are only plate-like sections but different from "a first plate and a second plate" as claimed in the claim 15 because they have protruding rings 3 and 4 (see col.4, lines 13-14) for attaching purpose. Hence, even if Krefft and Winsor could be combined, the combination still fails to teach, suggest "a first plate and a second plate" as claimed in the independent claim 15. In other words, the independent claim 15 is not rendered obvious by Krefft and Winsor, and thus patentable. Moreover, Krefft has a serpentine-shaped discharge path and its claim 3 claims one of three electrodes is a common electrode and used for guiding plasma. However, like Winsor, Krefft also experiences a higher temperature than that in the present invention. Regarding dependent claims 16-29, they should be patentable as a matter of law for the reason that they contain all limitations of their patentable base claim 15.

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CONCLUSION

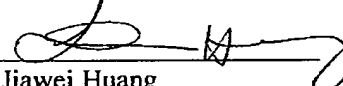
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For at least the foregoing reasons, it is believed that the pending claims 1-40 are in proper condition for allowance and an action to such effect is earnestly solicited. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Date: 2/1/2007

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Annotated Marked-up drawing

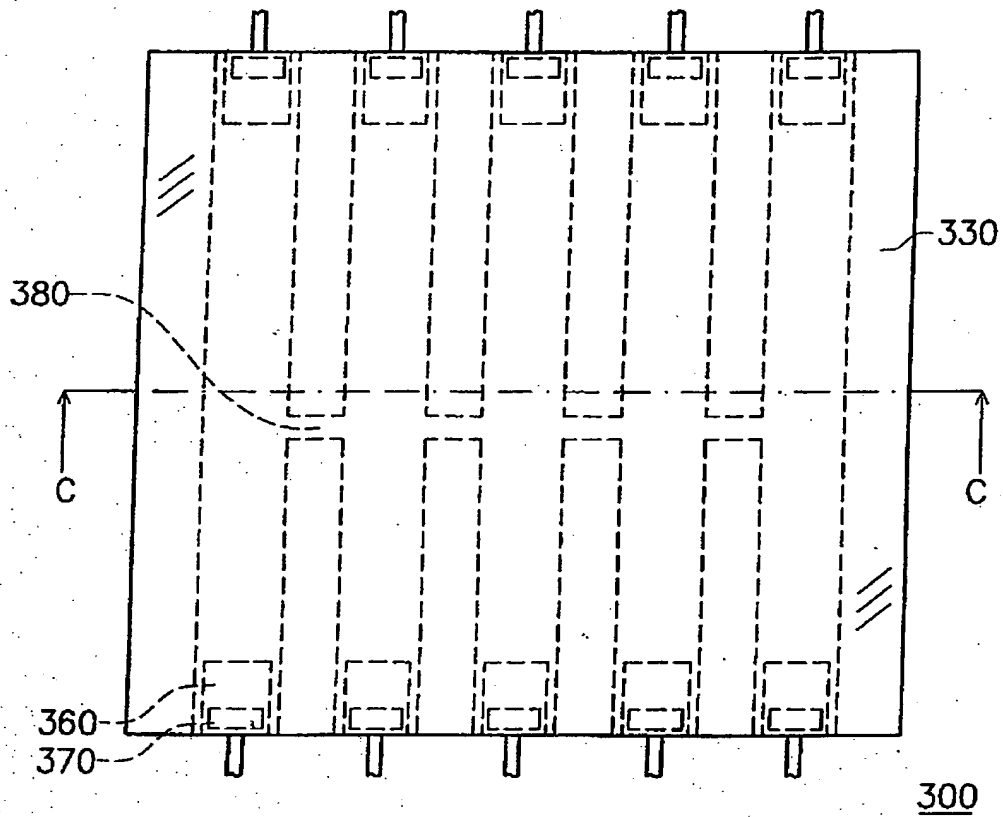


FIG. 7

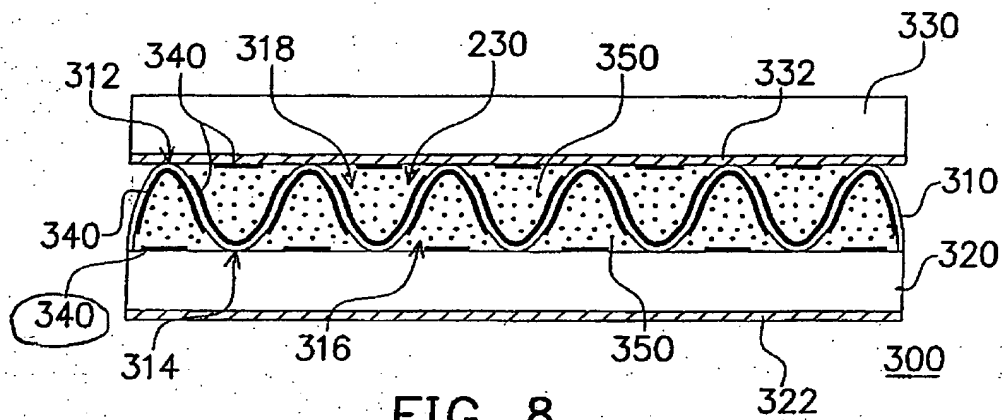


FIG. 8